

Hunting Ancient Treasure in DEEP SEA AUTOMOBILES

Taking Hints from Motor Cars, Aeroplanes and Hydroplanes, a German Inventor Makes It Easy and Safe for Divers to Search the Ocean's Bottom for Long Lost Wealth

The new Draegerwerk submarine sledge, with hydroplane stabilizing and steering devices and current guard, in which the diver is towed along the ocean's bottom by a power boat on the surface.

THE fascinations of deep-sea treasure hunting are inspiring inventors to make such explorations less hazardous and more profitable than they have proved heretofore. Aided by the ordinary diving costume, with its metal helmet and leaden boots, searchers for this sort of treasure have accurately charted scores of places where the ocean's bottom is strewn with the precious cargoes of ships that have been wrecked and sunk all along down the ages of the Christian era, and even earlier.

But these heavy leaden boots, and other deficiencies of ordinary diving apparatus, have interfered with adequate success in bringing this wealth of gold and silver, precious stones and objects of antique art to the surface. What was needed was some sort of mechanism whereby the deep-sea explorer could move about with more freedom, continue at his task for longer periods and work in co-operation with power-supplying craft on the surface.

Chevalier Pini, the Italian inventor, had some success with a submarine wheeled craft moving by its own power, but the device was not available below a certain depth, or where the bed of the sea was very uneven. It demonstrated the necessity of some means of constant co-operation between the diver and helpers on the surface, which would mean, also, constant communication with them.

The latter need was supplied some time ago by submarine telephone communication. Now a German firm—Messrs. Draegerwerk, of Lubeck—have profited by hints afforded by the automobile, the aeroplane and the hydroplane to perfect a deep-sea vehicle for the diver calculated to accomplish pretty nearly everything required of it.

This new device may be described as a sort of automobile, on runners instead of wheels, and having hydroplane attachments whereby its equilibrium can be maintained while the runners are off the bottom. The vehicle has no power of its own, being drawn through the water and along the bottom of the sea by a motor boat on the surface to which it is attached by wire cables, and with whose driver the diver is in communication by telephone.

This deep-sea vehicle is equipped with a "cartridge" which supplies the diver with pure air for a period of three hours. There is a steering mechanism actuated by compressed air supplied from a steel cylinder

fixed to each side of the body of the machine. At the back of the diver's seat—instead of in front, as the wind guard of an automobile—is a protective shell or hood to protect him from currents which his motion sets up.

When the diver in his costume—the helmet connecting his ears and mouth with telephone receiver and transmitter—is seated at the steering gear of his machine the whole is lowered over the side of the power boat and proceeds to sink to the bottom. The hydroplane attachments enable him to sink "on an even keel." Arrived at the bottom, if the natural light is too dim, he switches on his current from the power boat above, and has a searchlight, which he can direct from side to side, or up and down.

He has been lowered at some little distance from the charted sunken treasure. In response to his telephone order, the driver of the power boat on the surface proceeds to tow him forward. By manipulating the different hydroplanes he can steer a considerable distance to the right and left of the power boat's course, can even leap over obstructions on the ocean's bottom. For wider excursions he has only to telephone a new course to the power boat driver. Thus he can thoroughly explore, during the three hours of his pure air supply, quite a large area of sea bottom.

Having located the ancient wreck, he can jump out of his machine and proceed with his work of digging it out of the sand or mire, which has so long enveloped it, carrying back a load on his return to the surface. In the meantime he will have directed the placing of a buoy on the surface to mark the exact spot under which the treasure lies. After that it is only a question of tools, time

and labor to remove that particular bit of submarine treasure from the plans of other seekers.

This new system of deliberately, safely and practically going after riches dumped on the sea bottom was invented and perfected for the use of an expedition organized to further search the ocean's bottom off the coast of Tunis for priceless objects of ancient Greek art lost there by the wreck of a ship more than two thousand years ago. Within the last two years Greek sponge fishermen in the comparatively shallow waters three miles from shore brought up scores of bronze statues, marble busts and columns and other interesting and valuable objects which scientists agreed probably represented loot obtained in a Roman raid upon some Greek temple or palace.

The wreck of this ancient galley lies at a depth of 125 feet, and all about it lies a mass of marble columns with their bases and capitals—treasure too heavy to be brought

to the surface by ordinary means at the hands of sponge divers.

But if the new apparatus proves to equal in practice what is expected of it, there will doubtless be many more calls upon it. Probably it will be seized upon by the American expedition which is preparing to try and recover an item of \$7,000,000 in gold, silver and precious stones which has rested on the ocean's bottom in the Mona passage between

the islands of Porto Rico and Santo Domingo since September 23, 1537. This was the value of the cargo of the Spanish galleon Santa Margherita, which sailed on that date for Spain from the port of Santo Domingo, and was wrecked.

Other charted ocean treasures are almost too numerous to mention. The coast of Ireland is so covered with them that the "Green Isle" has been dubbed "Treasure Island."

How it is expected that the latest diving machine will solve the problem of bringing up the almost priceless ancient Greek art objects lost in the wreck of a Roman galley off the coast of Tunis 2,000 years ago.

How Parisian Modistes Have Drawn Upon the Balkan Holocaust for the Latest Fashion

ALL is grist which comes to the mill of fashion. The modistes of "gay Paris" have already drawn upon the disastrous conflict now raging in the Balkans for their latest creations, using as

models the uniforms worn by the contending soldiers.

How closely they have followed the styles in question will be seen by examining the accompanying photographs in connection

with the sketches. The Turks, the Servian, the Bulgarian and the Montenegrin soldier have all been used for the purpose and French women will be able to show their something for any one of the conflicting

nations by wearing a costume corresponding to the uniform worn by its soldiers.

Trouserettes are a feature of two of the designs shown, but a tight skirt answers the purpose in the case of the remaining

two. In adapting the soldier's uniform the military touch has very cleverly been eliminated, and it is only by actually comparing these new ladies' costumes with the uni-

form which suggested it that their source may be recognized.

Several of these latest creations have already made their appearance on the boulevards.



The Montenegrin Peasant Soldier and the Style He Is Responsible For.



The Bulgarian Private's Uniform Was the Source of the Design Here Shown.



A Servian Officer and the Picturesque Costume His Uniform Suggested.



The Turkish Uniform Which Suggested any old of always

